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EXAMINER

HIGA, BRENDAN Y

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/749,772	<b>Applicant(s)</b> SAVCHENKO ET AL.	
	<b>Examiner</b> BRENDAN HIGA	<b>Art Unit</b> 2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-28 and 30-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-28 and 30-40 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

This Office action is in response to Applicant's amendment and request for reconsideration filed on June 29, 2009.

The indicated allowability of claims 11 and 29 are withdrawn in view of the newly discovered reference(s) to Blizniak et al. (US 7,475,149). Rejections based on the newly cited reference(s) follow.

Claims 1-10, 12-28, and 30-40 are pending.

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1, 12, 19, 30, and 36 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 14, 22, 30 of U.S. Patent No. 7,487,513.

Current Application	US Patent No. 7,487,513
<p>1. (Currently amended) A method comprising:</p> <p>accessing a first logical port defining a first configuration of a service endpoint interface, the first logical port comprising an abstraction of an underlying port associated with the service endpoint interface;</p> <p>selecting an item of configuration information in the accessed first logical port to configure access to one or more operations of the service endpoint interface via the first logical port, the item of configuration information to set one or more of an HTTP proxy, user authentication information, and protocol configuration;</p> <p>providing a value for the selected item of configuration information to define, at least in part, the first configuration of the service endpoint interface; and</p> <p>providing access to the one or more operations of the service endpoint interface based on the item of configuration information and the value for the selected item of configuration information defined;</p> <p>accessing a second logical port defining a second configuration of the service endpoint interface;</p> <p>selecting a second item of configuration information in the accessed second logical port; and</p> <p>providing a value for the selected second item of configuration information to define, at least in part, the second configuration of the service endpoint interface.</p>	<p>1. A computer-implemented method for generating a deployable Web service archive, comprising:</p> <p>selecting a Web service implementation comprising a plurality of Web service operations and a plurality of Web service parameters; generating <u>a first virtual interface to the Web service implementation, the first virtual interface to expose a first subset of the Web service operations and Web service parameters;</u></p> <p><u>generating a second virtual interface to the Web service implementation, the second virtual interface to expose a second subset of the Web service operations and Web service parameters different, at least in part, than the first subset of the Web service operations and Web service parameters;</u></p> <p>generating a Web service definition for each of the first and second virtual interfaces, each Web service definition specifying a protocol-independent <u>communication type for communications with the Web service implementation via the first and second virtual interfaces, and further specifying a protocol-independent authentication type for authenticating with the Web service implementation via the first and second virtual interfaces;</u></p> <p>generating a Web service deployment descriptor for each Web service definition, each Web service deployment descriptor defining a communication protocol to implement the specified protocol-independent communication type of the corresponding Web service definition, and further defining an authentication protocol to implement the specified protocol-independent authentication</p>

	<p>type of the corresponding Web service definition; and generating the deployable Web service archive, the deployable Web service archive comprising the Web service implementation, the first and second virtual interfaces to the Web service implementation, the Web service definition for each of the first and second virtual interfaces, and the Web service deployment descriptor for each Web service definition.</p>
<p>12. (Currently amended) An application server comprising:</p> <p>a Web service client having a service endpoint interface to expose a Web service method to a client application; and</p> <p>a processor and logic executable thereon to:</p> <p>access a first logical port defining a first configuration of the service endpoint interface, the first logical port comprising an abstraction of an underlying port associated with the service endpoint interface,</p> <p>select an item of configuration information in the accessed first logical port to configure access to one or more operations of the service endpoint interface via the first logical port, the item of configuration information to set one or more of an HTTP proxy, user authentication information, and protocol configuration,</p> <p>provide a value for the selected item of configuration information to define, at least in part, the first configuration of the service endpoint interface; and wherein the processor and logic to further:</p>	<p>14. A method comprising: selecting a Web service implementation comprising a plurality of Web service operations and a plurality of Web service parameters; <u>generating a first virtual interface to the Web service implementation, the first virtual interface to expose a first subset of the Web service operations and Web service parameters;</u> <u>generating a second virtual interface to the Web service implementation, the second virtual interface to expose a second subset of the Web service operations and Web service parameters different, at least in part, than the first subset of the Web service operations and Web service parameters;</u> <u>generating a Web service definition for each of the first and second virtual interfaces, each Web service definition specifying a protocol-independent communication type for communications with the Web service implementation via the first and second virtual interfaces, and further specifying a</u></p>

<p>access a second logical port defining a second configuration of the service endpoint interface,</p> <p>select a second item of configuration information in the accessed second logical port, and provide a value for the selected second item of configuration information to define, at least in part, the second configuration of the service endpoint interface.</p>	<p><u>protocol-independent authentication type for authentication with the Web service implementation via the first and second virtual interfaces;</u></p> <p>generating a Web service deployment descriptor for each Web service definition, each Web service deployment descriptor defining a communication protocol to implement the protocol-independent communication type specified by the Web service definition, and further defining an authentication protocol to implement the protocol-independent authentication type specified by the Web service definition; and sending the Web service implementation, the first and second virtual interfaces, the Web service definition for each of the first and second virtual interfaces, and the Web service deployment descriptor for each Web service definition to a Web service directory server.</p>
<p>19. (Currently amended) A Web service client comprising:</p> <p>a service endpoint interface to expose a Web service method to a client application;</p> <p>a logical port implemented between the client application and the service endpoint interface to define a first configuration of the service endpoint interface, the logical port comprising an abstraction of an underlying port associated with the service endpoint interface, wherein the logical port to provide one or more of an HTTP proxy, user authentication information, and protocol</p>	<p>22. An article of manufacture having instructions stored thereon that, when executed by a processor, cause the processor to perform a method comprising:</p> <p><u>selecting a Web service implementation comprising a plurality of Web service operations and a plurality of Web service parameters; generating a first virtual interface to the Web service implementation, the first virtual interface to expose a first subset of the Web service operations and Web service</u></p>

<p>configuration to set the first configuration; and</p> <p>a second logical port implemented between the client application and the service endpoint interface to define a second configuration of the service endpoint interface.</p>	<p><u>parameters; generating a second virtual interface to the Web service implementation, the second virtual interface to expose a second subset of the Web service operations and Web service parameters different, at least in part, than the first subset of the Web service operations and Web service parameters;</u></p> <p>generating a Web service definition for each of the first and second virtual interfaces, each Web service definition specifying a protocol-independent communication type for communications with the Web service implementation via the first and second virtual interfaces, and further <u>specifying a protocol-independent authentication type for authentication with the Web service implementation via the first and second virtual interfaces;</u></p> <p>generating a Web service deployment descriptor for each Web service definition, each Web service deployment descriptor defining a communication protocol to implement the protocol-independent communication type specified by the Web service definition, and further defining an authentication protocol to implement the protocol-independent authentication type specified by the Web service definition; and</p> <p>sending the Web service implementation, the first and second virtual interfaces, the Web service</p>
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	definition for each of the first and second virtual interfaces, and the Web service deployment descriptor for each Web service definition to a Web service directory server.
<p>30. (Currently amended) A system comprising:</p> <p>a means for accessing a first logical port defining a first configuration of a service endpoint interface, the first logical port comprising an abstraction of an underlying port associated with the service endpoint interface;</p> <p>a means for selecting an item of configuration information in the accessed first logical port to configure access to one or more operations of the service endpoint interface via the first logical port, the item of configuration information to set one or more of an HTTP proxy, user authentication information, and protocol configuration;</p> <p>a means for providing a value for the selected item of configuration information to define, at least in part, the first configuration of the service endpoint interface;</p> <p>a means for providing access to the one or more operations of the service endpoint interface based on the item of configuration information and the value for the selected item of configuration information defined;</p> <p>a means for accessing a second logical port defining a second configuration of the service endpoint interface;</p> <p>a means for selecting a second item of</p>	<p>30. A system having at least one processor comprising:</p> <p>means for selecting a Web service implementation comprising a plurality of Web service operations and a plurality of Web service parameters;</p> <p><u>means for generating a first virtual interface to the Web service implementation, the first virtual interface to expose a first subset of the Web service operations and Web service parameters;</u></p> <p><u>means for generating a second virtual interface to the Web service implementation, the second virtual interface to expose a second subset of the Web service operations and Web service parameters different, at least in part, than the first subset of the Web service operations and Web service parameters;</u></p> <p>means for generating a Web service definition for each of the first and second virtual interfaces, each Web service definition comprising means for specifying a protocol-independent communication type for communications with the Web service implementation via the first and second virtual interfaces, and further comprising means for</p>



<p>configuration information in the accessed second logical port; and</p> <p>a means for providing a value for the selected second item of configuration information to define, at least in part, the second configuration of the service endpoint interface.</p>	<p><u>specifying a protocol-independent authentication type for authenticating with the Web service implementation via the first and second virtual interfaces</u>; means for generating a Web service deployment descriptor for each Web service definition, each Web service deployment descriptor comprising means for defining a communication protocol to implement the specified protocol-independent communication type of the corresponding Web service definition, and further comprising means for defining an authentication protocol to implement the specified protocol-independent authentication type of the corresponding Web service definition; and means for generating a deployable Web service archive comprising the Web service implementation, the first and second virtual interfaces to the Web service implementation, the Web service definition for each of the first and second virtual interfaces, and the Web service deployment descriptor for each Web service definition.</p>
<p>36. (Currently amended) A system readable storage medium having An instructions that, when executed by an apparatus, cause the apparatus to perform a method comprising:</p> <p>accessing a first logical port defining a first</p>	<p>22. An article of manufacture having instructions stored thereon that, when executed by a processor, cause the processor to perform a method comprising:</p> <p><u>selecting a Web service implementation comprising</u></p>

<p>configuration of a service endpoint interface, the first logical port comprising an abstraction of an underlying port associated with the service endpoint interface;</p> <p>selecting an item of configuration information in the accessed first logical port to configure access to one or more operations of the service endpoint interface via the first logical port, the item of configuration information to set one or more of an HTTP proxy, user authentication information, and protocol configuration;</p> <p>providing a value for the selected item of configuration information to define, at least in part, the first configuration of the service endpoint interface; providing access to the one or more operations of the service endpoint interface based on the item of configuration information and the value for the selected item of configuration information defined;</p> <p>accessing a second logical port defining a second configuration of the service endpoint interface; selecting a second item of configuration information in the accessed second logical port; and providing a value for the selected second item of configuration information to define, at least in part, the second configuration of the service endpoint interface.</p>	<p><u>a plurality of Web service operations and a plurality of Web service parameters; generating a first virtual interface to the Web service implementation, the first virtual interface to expose a first subset of the Web service operations and Web service parameters; generating a second virtual interface to the Web service implementation, the second virtual interface to expose a second subset of the Web service operations and Web service parameters different, at least in part, than the first subset of the Web service operations and Web service parameters;</u></p> <p>generating a Web service definition for each of the first and second virtual interfaces, each Web service definition specifying a protocol-independent communication type for communications with the Web service implementation via the first and second virtual interfaces, and further <u>specifying a protocol-independent authentication type for authentication with the Web service implementation via the first and second virtual interfaces;</u></p> <p>generating a Web service deployment descriptor for each Web service definition, each Web service deployment descriptor defining a communication protocol to implement the protocol-independent communication type specified by the Web service definition, and further defining an authentication</p>
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	protocol to implement the protocol-independent authentication type specified by the Web service definition; and  sending the Web service implementation, the first and second virtual interfaces, the Web service definition for each of the first and second virtual interfaces, and the Web service deployment descriptor for each Web service definition to a Web service directory server.
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Although the conflicting claims are not identical, they are not patentably distinct from each other because a person having ordinary skill in the art would view 'the generating and defining of a first and second virtual interfaces to expose a first and second subset of the Web service operations and web service parameters, including specifying an authentication type' (claimed in Patent 7,487,513) as anticipating the later 'accessing [of the generated] first and second virtual interface to configure the first and second subset of the Web service operations and web service parameters, including specifying, inter alia, user authentication information' with respect to the claims of the current Application.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1-4, 10, 12-15, 18-22, 25, 28, 30-33 and 36-38 are rejected under 35 U.S.C.**

**103(a) as being unpatentable over Sharma et al. (US 2003/0204645) ("Sharma"), in further view of Blitzniak et al. (US 7,475,145).**

As per claim 1, Sharma teaches:

Accessing a first logical port ("logical service reference", see ¶0118) defining a first configuration of a service endpoint interface (see ¶0118, *"Deployer 137 may link a service reference to an actual representation and configuration of a corresponding service"*, read as accessing a logical port defining a first configuration of a service endpoint interface), the first logical port comprising an abstraction of an underlying port associated with the service endpoint interface (see ¶0118, *wherein the logical service reference (i.e. the first logical port comprising an abstraction...) links to an actual representation and configuration of a corresponding service (i.e. service endpoint 555) read as an underlying port associated with the service endpoint interface*)

Selecting an item of configuration in the accessed first logical port (see ¶0118, *"endpoint address for service endpoint 555, properties specific to a protocol 535 and underlying transport 540 that may be used by client 510 to communicate with server 530, security information, and type mapping registry information"* read as items of configuration of the service endpoint interface) to configure access to one or more operations of the service endpoint interface via the first logical port (see ¶0018,

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*“Deployer 137 may also provide and configure information for the service instance and service endpoint proxies”,* which implies access to one or more operations of the service endpoint interface via the first logical port (i.e. “logical service reference”, see ¶0118)), the item of configuration information to set one or more of an HTTP proxy, user authentication information, and protocol configuration (see ¶0118, “properties specific to a protocol 535”, read as protocol configuration); and

providing a value for the selected item of configuration information to define, at least in part, the first configuration of the service endpoint interface (see ¶0118, *“Deployer may also provide and configure information for the service instance and service endpoint proxies”,* also see ¶0113 wherein the proxy represents a service endpoint interface, i.e. Fig. 5, ref. 555).

As per claim 1, Sharma does not expressly teach accessing a second logical port defining a second configuration of the service endpoint interface, selecting a second item of configuration information in the accessed second logical port; and providing a value for the selected second item of configuration information to define, at least in part, the second configuration of the service endpoint interface.

Nevertheless, in the same art of web service invocation, Blitzniak teaches a system that for accessing a service endpoint interface (i.e. “http://localhost/ibm/wsdl/myService.asp’>”, see col. 1, line 35, col. 2, line 12) via a first and second logical ports (i.e. a “soap” port or a “http” port) for accessing multiple configuration of a service endpoint interface (see col. 1, line 35, col. 2, line 12, read as a SOAP configuration, a HTTP configuration, and a SMTP configuration).

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A person having ordinary skill in the art would have been motivated to modify the teachings of Sharma with the teachings of Blitzniak. The motivation for doing so would have been to expose a web service via multiple transport protocols.

As per claim 2, Sharma further teaches providing a HyperText Transfer Protocol (HTTP) proxy address for the first configuration of the service endpoint interface (see ¶0118 “the configuration information may include the endpoint address for service endpoints” and ¶0087 wherein Sharma provides an example of endpoint address as “http://example.com/stockquite”, read as an HTTP proxy address)

As per claim 3, Sharma further teaches providing an access address for the first configuration of the service endpoint interface (see ¶0118, “*endpoint address for service endpoint 555*”, read as a access address).

As per claim 4, Sharma further teach providing the access address being a Uniform Resource Locator (URL) for the first configuration of the service endpoint interface (see ¶0118 and ¶0087 wherein Sharma provides an example of endpoint address as “http://example.com/stockquite”, read as a URL).

As per claim 10, Sharma further teaches specifying a name for the first configuration of the service endpoint interface (see ¶0118 and ¶0087 wherein Sharma provides an example of endpoint address as “http://example.com/stockquite”, read as a [URL] name for the first configuration of the service endpoint interface).

As per claim 12, Sharma teaches:

A Web service client (see Fig. 5, ref. 510, ¶0111) having a service endpoint interface to expose a Web service method to a client application (see ¶0112-¶0013, *“Once the WSDL document 550 corresponding to the target service is located, the document may be imported by client 510”...“Once imported the WSDL document may be processed by a WSDL-to-Java mapping tool executing in client 130 that generates”, inter alia, “a service endpoint interface”, read as a web service client having a service endpoint interface for exposing a web service to a client application*); and

a processor and logic executable thereon to access a first logical port (“logical service reference”, see ¶0118) defining a first configuration of the service endpoint interface (see ¶0118, *“Deployer 137 may link a service reference to an actual representation and configuration of a corresponding service”, read as a deployer 137 providing a logical port defining a service interface*), the first logical port comprising an abstraction of an underlying port associated with the service endpoint interface (see ¶0118, *wherein the logical service reference (i.e. the first logical port comprising an abstraction...) links to an actual representation and configuration of a corresponding service (i.e. service endpoint 555) read as an underlying port associated with the service endpoint interface*),

provide configuration information based on one or more of an HTTP proxy, user authentication information, and protocol configuration (see ¶0118, *“properties specific to a protocol 535”, read as protocol configuration*) for the accessed first logical port to define, at least in part, the first configuration of the service endpoint interface (see

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¶0118, *“Deployer may also provide and configure information for the service instance and service endpoint proxies”*); and

provide access to one or more operations of the service endpoint interface via the first logical port (see ¶0018, *“Deployer 137 may also provide and configure information for the service instance and service endpoint proxies”*, which implies access to one or more operations of the service endpoint interface via the first logical port (i.e. “logical service reference”, see ¶0118)),

As per claim 19, Sharma teaches:

A service endpoint interface to expose a Web service method to a client application (see ¶0112-¶0013, *“Once the WSDL document 550 corresponding to the target service is located, the document may be imported by client 510”...“Once imported the WSDL document may be processed by a WSDL-to-Java mapping tool executing in client 130 that generates”, inter alia, “a service endpoint interface”, read as a web service client having a service endpoint interface for exposing a web service to a client application*); and

A logical port (“logical service reference”, see ¶0118) implemented between the client application and the service endpoint interface to define a first configuration of the service endpoint interface (see ¶0118, *“Deployer 137 may link a service reference to an actual representation and configuration of a corresponding service”*, read as a deployer 137 providing a logical port defining a service interface between a client application and the service endpoint interface), the first logical port comprising an abstraction of an underlying port associated with the service endpoint interface (see ¶0118, *wherein the*



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*logical service reference (i.e. the first logical port comprising an abstraction...) links to an actual representation and configuration of a corresponding service (i.e. service endpoint 555) read as an underlying port associated with the service endpoint interface),* Wherein the logical port to provide one or more of an HTTP proxy, user authentication information, and protocol configuration to set the first configuration (see ¶0118, “properties specific to a protocol 535”, read as protocol configuration).

As per claim 19, Sharma does not expressly teach accessing a second logical port defining a second configuration of the service endpoint interface, selecting a second item of configuration information in the accessed second logical port; and providing a value for the selected second item of configuration information to define, at least in part, the second configuration of the service endpoint interface.

Nevertheless, in the same art of web service invocation, Blitzniak teaches a system that for accessing a service endpoint interface (i.e. "http://localhost/ibm/wsdl/myService.asp'>") via a first and second logical ports (i.e. a “soap” port or a “http” port) to configuring and accessing multiple configuration of a service endpoint interface (see col. 1, line 35, col. 2, line 12, read as a SOAP configuration, a HTTP configuration, and a SMTP configuration).

A person having ordinary skill in the art would have been motivated to modify the teachings of Sharma with the teachings of Blitzniak. The motivation for doing so would have been to expose a web service via multiple transport protocols.

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As per claim 28, Sharma further teaches wherein the Web service method is based, at least in part, on a Web Service Description Language (WSDL) PortType as specified in a WSDL document describing the Web service method (see ¶0069).

Claims 13, 14, 15, 18, 20, 21, 22, 25, 30, 31, 32, 33, 36, 37 and 38 are rejected under the same rationale as claims 1-4, 10, 12, 19 and 28 since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

**Claims 5, 6, 16, 23, 24, 34 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. (US 2003/0204645) (“Sharma”), in view of Blitzniak et al. (US 7,475,145), in view of Omoigui (US 2003/0126136) (“Omoigui”).**

As per claim 5, Sharma further teaches the configuration information including “security information” see ¶0118, however Sharma does not expressly teach specifying an authentication type for the first configuration of the service endpoint interface.

Nevertheless, authentication type information is typically used in the computer networking art for security purposes. For example, in the same art of web services, Omoigui teaches a system that employs various authentication schemes for providing access to web services, including client certificates over SSL (see ¶0370).

One of skill in the art would have been motivated to modify the teachings of Sharma with the teachings of Omoigui for configuring authentication schemes such as client certificates over SSL for accessing web services. The motivation for doing so

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would have been to prevent the accessing of web services by unauthorized clients in Sharma's invention.

As per claim 6, Sharma further teaches the configuration information including "security information" see ¶0118, however Sharma does not expressly teach the use of client certificates for the first configuration of the service endpoint interface.

Nevertheless in the same art as noted above Omoigui teaches a system that employs various authentication schemes for providing access to web services, including client certificates over SSL (see ¶0370).

One of skill in the art would have been motivated to modify the teachings of Sharma with the teachings of Omoigui for configuring authentication schemes such as client certificates over SSL for accessing web services. The motivation for doing so would have been to prevent the accessing of web services by unauthorized clients in Sharma's invention.

Claims 16, 23, 24, 34 and 40 are rejected under the same rationale as claims 5 and 6 since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

**Claims 7, 17, 35 and 39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. (US 2003/0204645) ("Sharma"), in view of Blitzniak et al. (US 7,475,145), in further view of Beringer et al. (US 2004/0172555) ("Beringer").**

As per claim 7, Sharma does not teach the specific properties specifying a transport guarantee for the first configuration of the service endpoint interface.

However, in the same art of web service configuring, Beringer teaches a system for defining security information for web services. Specifically, Beringer teaches defining security features, including a confidentiality element for a message transmitted to a service provider for securing the message (see abstract and Fig. 4, ref. 46). (read as a transport guarantee feature consistent with the applicant's specification, see page 46 ¶0097 *"In an embodiment, Web service definition 2600 may specify transport guarantee features. For example, Web service definition 2600 may define whether or not data integrity and/or data confidentiality are to be supported for the associated virtual interface"*).

One of skill in the art would have been motivated to modify the teachings of Sharma with the teachings of Beringer for defining a transport guarantee feature of the service endpoint interface. The motivation for doing so would have been for securing the web service messages within the teachings of Sharma.

Claims 17, 35 and 39 are rejected under the same rationale as claim 7 since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

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**Claims 8, 9, 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sharma et al. (US 2003/0204645) (“Sharma”), in view of Blitzniak et al. (US 7,475,145), in further in view of Brown et al. (US 2004/0199636) (“Brown”).**

As per claim 8, Sharma further teaches the configuration information including “security information”, see ¶0118. However, Sharma does not expressly teach the security information including an encryption type for the first configuration of the service endpoint interface.

Nevertheless, encryption type information is typically used in the computer networking art for security purposes. For example, in the same art of web services, Brown teaches the use of an encryption type, such as the secure socket layer (SSL), for accessing web services (see ¶0043).

One of skill in the art would have been motivated to modify the teachings of Sharma with the teachings of Brown for configuring an encryption type for the first configuration of the service endpoint interface. The motivation for doing so would have been to provide a secure connection for accessing web services in Sharma’s invention.

As per claim 9, Sharma further teaches the configuration information including “security information”, see ¶0118. However, Sharma does not expressly teach the specified encryption type is a Secure Socket Layer protocol based encryption type.

Nevertheless, in the same art as noted above, Brown teaches the use of an encryption type, such as the secure socket layer (SSL), for accessing web services (see ¶0043).

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One of skill in the art would have been motivated to modify the teachings of Sharma with the teachings of Brown for configuring an encryption type, such as the SSL protocol, for the first configuration of the service endpoint interface. The motivation for doing so would have been to provide a secure connection for accessing web services in Sharma's invention.

Claims 26 and 27 are rejected under the same rationale as claims 8 and 9 since they recite substantially identical subject matter. Any differences between the claims do not result in patentably distinct claims and all of the limitations are taught by the above cited art.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (see PTO 892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRENDAN HIGA whose telephone number is (571)272-5823. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571)272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2453

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